

"Virtualization offers significant benefits, including better security, manageability and access to applications in a distributed world." Forrester Research, January 5, 2006

"Anytime, Anywhere Government Services"

Gartner Research - Trend:

"By the end of 2008, more than 300,000 users licenses for host virtual desktops will have been bought. By the end of 2013, approximately 50,000,000 user licenses will have been bought"

■ The *VISION* is to architect a Virtualized Infrastructure Solution which will maximize the value of desktop virtualization with IP Phone connectivity through increased availability, increased flexibility, and simplified maintenance.

■ The *GOAL* is to develop a, shared-use comprehensive desktop virtualization solutions with integrated management of hardware and software by partnering with industry leaders.

The SCOPE is to develop and deploy the Virtualized Infrastructure Solution for the Arizona Department of Administration (ADOA) in partnership with local governments, educational institutions and the business community.

Partnerships to date

Vendor Partners ---























Black Box, to start

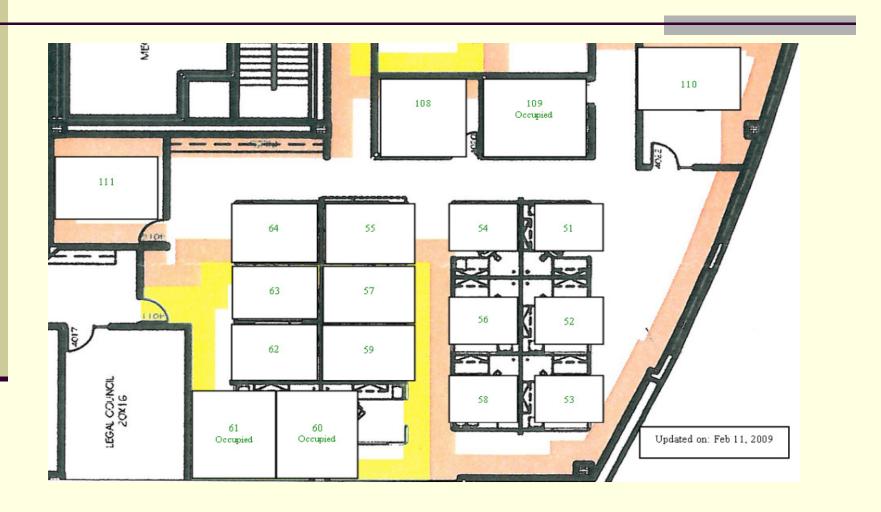
Government groups---- (ADOA, AZNet, GITA, ASU, Department of Education, to start).

- Our partners are providing desktop virtualization hardware and software for 24 mock offices including servers and switches.
- Our partners will provide architecture, design, deployment, and migration guidance detailing the proposed virtualization solution.
- ADOA will provide office space, rack space, wiring, power and staff on hand.

Continued...

- ADOA Desktop Virtualization Team will assist with development and deployment.
- Partners will provide demo hardware, software and any applicable equipment as a Proof Of Concept.

Floor Plan of 24 mock offices



6/9/2010

9

Mock Office Scenario's

Administrators	Analysts
Professionals	
Call Center employees	Customer Service Desks
Consultants	Temp Staff
Interns	Remote Employees
Teleworkers	Inspectors
Mobile Workers	Leadership

Total Cost of Ownership Estimates

According to a study by Gartner:

(TCO Comparison of PCs with Server-Based Computing, June 2006) thin client TCO annual savings have been measured as high as:

- •79% less downtime cost per user
- •16% capital cost savings
- •34% less in maintenance
- •19% less to operate
- •48% overall lower total cost savings

Financial Case

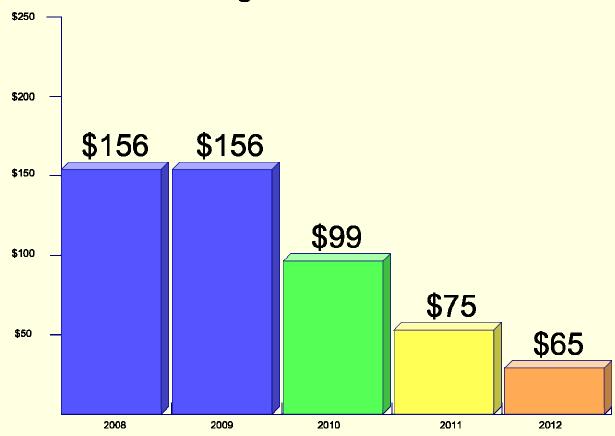
- The financial case is clear: server-hosted virtual infrastructure can save significant IT capital and operational costs.
- Centralizing servers and server support staff leads directly to higher utilization levels.
- Simplified software deployment radically reduces rollout and upgrade costs.
- Longer lifetimes of terminals reduce capital expenditure.
- Reduced power consumption directly lowers energy costs, and indirectly lowers cooling requirements.

Problems To Solve with VGTC

- Many versions of software <u>now available</u>
- Software rarely used <u>now available</u>
- Purchasing only licenses than you need
- Being at a <u>State-of-the-Art</u> level with HW/SW
- Refresh can pay for costs as you go

ADOA Per Month Cost Per Seat

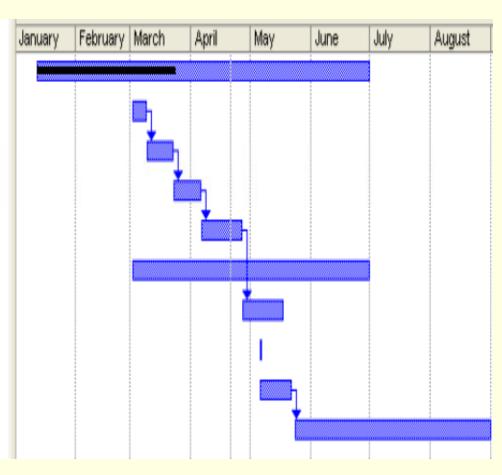
Cost Savings Estimate Per Seat



Timeline to Build (VGTC)

Timeline:

	Task Name
1	Requirements Gathering and Planning
2	High Level Design (Network, Security, Storage)
3	Low Level Design (Servers, Thin Clients, Mobil)
4	HW and SW Implementation
5	Image Development and Presentation
6	Knowledge Transfer of Virtual Desktop Support
7	User Acceptance Testing
8	Next Phase Go-No-Go
9	ADOA Virtual Desktop Design, and Development
10	Deployment



Timeline VGTC over coming years

2010 2011 2012 2013

Demo existing technology on state contract not yet fully deployed

Add new releases of licensed software (ie. Office 2010)

Wireless devices (ie. lpad)

WIFI possibilities

Mobile Applications (self service)

VGTC - Location for two years

The Virtual Government Technology Center location:

Arizona State Capitol Mall
Department of Administration
100 N. 15th Avenue Suite 400
Phoenix, AZ 85007

You are welcome to come take a tour in July! Email atul.patel@azdoa.gov

Q & A

"The virtual desktop revolution is here..."



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